

# **Green Workplace Challenge Toolkit**

# **Building a Green Team:**

Building a Green Team is a great place to start the Green Workplace Challenge. A team of employees who can help to identify areas for improvement is vital to initiating and supporting your workplace's sustainability efforts.

### **Resources:**

- EPA: Creating A Green Team http://www.energystar.gov/ia/business/challenge/bygtw/Creating\_a\_Green\_Team.pdf
- EPA: Green Team Checklist http://www.energystar.gov/ia/business/challenge/bygtw/Green\_team\_checklist\_FINAL\_4.pdf

## **Writing Sustainability Guidelines:**

Sustainability guidelines and policies can help promote a green office by providing concrete tips and steps for employees. The Green Workplace Challenge scorecard is intended to help you identify ideas for your workplace.

- NRDC Greening Advisor: "An Organizational Wide Environmental Policy" <a href="http://www.nrdc.org/enterprise/greeningadvisor/gpp-environ\_policy.asp">http://www.nrdc.org/enterprise/greeningadvisor/gpp-environ\_policy.asp</a>
- Putting Energy Into Profits: ENERGY STAR® Guide for Small Businesses http://www.energystar.gov/ia/business/small\_business/sb\_guidebook/smallbizguide.pdf
- EPA: At the Office http://www.epa.gov/climatechange/wycd/office.html

# **Staff Education & Programming:**

Education can be a powerful tool to green the culture at your organization. Increased knowledge and awareness can enhance employee engagement in your organization's efforts and focus them on their personal environmental impacts. One seminar or class has the potential to impact employee behaviors, thereby greening your workplace and saving money through more efficient use of resources.

### **Resources:**

- Department of Energy: Energy Education & Workforce Development http://www1.eere.energy.gov/education/other\_training.html
- GreenBiz: Ten Keys for Educating and Engaging Employees
  <a href="http://www.greenbiz.com/business/research/report/2000/11/09/ten-keys-educating-and-engaging-employees">http://www.greenbiz.com/business/research/report/2000/11/09/ten-keys-educating-and-engaging-employees</a>
- EPA: ENERGY STAR® Training http://www.energystar.gov/index.cfm?c=business.bus\_internet\_presentations

## **Measuring & Sharing Employee Progress:**

Measuring and sharing employee progress throughout the Green Workplace Challenge will not only help employees track their success, but it will also help to continue awareness and keep up motivation. Some ideas for celebrating green office efforts and successes include: (1) having a "Green Week"; (2) sending regular emails to staff highlighting the impact of green efforts in various departments; and (3) regularly sharing interesting "green" statistics.

#### **Resources:**

- NRDC-Greening Advisor: Involving Staff at All Levels http://www.nrdc.org/enterprise/greeningadvisor/gpp-staff.asp
- EPA-Fast Facts on Energy Use http://www.energystar.gov/ia/business/challenge/learn\_more/FastFacts.pdf
- NRDC-Greening Advisor: Communicating Environmental Initiatives to the Public

http://www.nrdc.org/enterprise/greeningadvisor/gpp-communicating.asp

# **Encouraging Community Service & Volunteerism:**

Volunteerism supporting green and sustainability efforts positively impacts the environment directly and likely will make a positive impact on the personal behaviors of your employees that engage in volunteer projects. It is only by working together that Nashville will become the greenest city in the Southeast!

#### **Resources:**

- Impact Nashville http://www.impactnashville.net
- Hands On Nashville http://www.hon.org

## Performing a Professional Energy Audit:

An energy audit is one of the most effective ways to identify the ways in which your building wastes energy and money. Most professional audits not only identify the problem areas but also will explain your options to improve your energy efficiency. Armed with the knowledge provided by a professional audit, your organization can make informed decisions regarding your building maintenance and upgrades.

If your organization is ready to make energy efficient improvements to your facilities, funding assistance is available through Pathway Lending's Energy Efficiency Loan Program. See <a href="https://www.pathwaylending.org/loans/energy">https://www.pathwaylending.org/loans/energy</a> for more information.

- NES-Energy Right Solutions for Business http://nespower.com/comm\_advice.html
- FEMP-Contracting for a Resource Efficiency Manager http://www1.eere.energy.gov/femp/pdfs/rem\_guidebook.pdf

## **Calculating & Reducing Energy Use:**

Most organizations find that there are modest solutions that can dramatically reduce energy consumption. Reviewing your past 12 months of energy statements to use as a benchmark is an important step in helping you control and reduce energy costs. A 10% goal should be achievable by most offices, but don't let that stop you. Energy reductions of up to 30% can be achieved at the typical office building.

### **Resources:**

- TVA-Commercial Energy Calculator http://www.energyright.com/business/e\_calc.html
- DOE-Office Energy Checklist http://www1.eere.energy.gov/femp/services/energy\_aware\_oec.html
- DSIRE-Tennessee Commercial Energy Efficiency Loan Program http://www.dsireusa.org/incentives/incentive.cfm?Incentive Code=TN65F&re=1&ee=1

# Writing a "Lights Out/Power Down" Policy:

Lighting and electronics consume most of the energy in a typical office building. Simply getting employees and your IT department in the habit of turning these off at the end of each workday or when they are not in use can be a very simple way to cut your electricity expenses. These simple actions that can be as simple as changing default settings.

- DOE-Energy Savers: When to Turn Off Your Lights
  <a href="http://www.energysavers.gov/your\_home/lighting\_daylighting/index.cfm/mytopic=12280">http://www.energysavers.gov/your\_home/lighting\_daylighting/index.cfm/mytopic=12280</a>
- **DOE-Energy Savers: When to Turn Off Personal Computers** http://www.energysavers.gov/your\_home/appliances/index.cfm/mytopic=10070
- EPA-Power Manage Computers to Save Up to \$50 Per Computer Annually http://www.energystar.gov/index.cfm?c=power mgt.pr power mgt low carbon join

# **Timed Lighting and Occupancy Sensors:**

Timed lighting and occupancy sensors are a simple way to ensure that areas of your office are not using lighting energy unnecessarily. Sensors in kitchens, bathrooms, supply closets, and other common areas will mean that your energy bill won't increase because someone forgot to turn out the lights.

### **Resources:**

- TVA-Energy Solutions: Lighting Controls http://www.energyright.com/business/energy\_lib.html
- DOE-Energy Savers: Lighting Controls
  <a href="http://www.energysavers.gov/your\_home/lighting\_daylighting/index.cfm/mytopic=12180">http://www.energysavers.gov/your\_home/lighting\_daylighting/index.cfm/mytopic=12180</a>

### **Switching to CFL Bulbs:**

Compact Fluorescent Light (CFL) bulbs last longer than the typical light bulb and use far less energy. As CFL bulb technology has advanced considerably, there is a CFL bulb that is right for most office uses. Companies with a considerable number of light bulbs can also save money by decreasing the volume of bulbs purchased and the fewer hours spent by maintenance staff replacing light bulbs.

- TVA: Energy Solutions: Compact Fluorescent Light (CFL) Bulbs http://www.tva.com/cfl/index.htm
- DOE: Energy Savers: Compact Fluorescent Lamps
  <a href="http://www.energysavers.gov/your-home/lighting-daylighting/index.cfm/mytopic=12050">http://www.energysavers.gov/your-home/lighting-daylighting/index.cfm/mytopic=12050</a>
- NRDC: CFLs Are Safe for your Home http://www.nrdc.org/energy/cfl.pdf

# **Assessing HVAC Efficiency:**

HVAC systems use a lot of energy but their impact can be greatly reduced by ensuring that they run as efficiently as possible. Sealing ducts, weatherproofing, and other strategies will help increase the efficiency of your system and decrease the power consumption wasted on lost air.

#### **Resources:**

- **EPA-Heat and Cool Efficiently** http://www.energystar.gov/index.cfm?c=heat\_cool.pr\_hvac
- DOE-Energy Savers: Space Heating and Cooling
  <a href="http://www.energysavers.gov/your\_home/space\_heating\_cooling/index.cfm/mytopic=12300">http://www.energysavers.gov/your\_home/space\_heating\_cooling/index.cfm/mytopic=12300</a>

# **ENERGY STAR Equipment Inventory:**

ENERGY STAR appliances can help your office save energy without losing the convenience of your favorite office equipment and appliances.

#### **Resources:**

- EPA-ENERGY STAR® Qualified Products http://www.energystar.gov/index.cfm?fuseaction=find\_a\_product.
- EPA-ENERGY STAR® Savings Calculators
  <a href="http://www.energystar.gov/index.cfm?c=bulk-purchasing.bus-purchasing">http://www.energystar.gov/index.cfm?c=bulk-purchasing.bus-purchasing

### **Onsite Renewable Energy and Renewable Energy Certificates (RECs):**

Green Power Switch provided through TVA allows businesses to buy energy produced with sustainable resources. A solar panel or other energy producing installation can pay itself back in energy savings and even result in a payout if you are able to produce more energy than you consume.

- TVA-Generation Partners
- TVA-Green Power Switch http://www.tva.gov/greenpowerswitch
- EPA-Guide to Purchasing Green Power http://www.epa.gov/greenpower/documents/purchasing guide for web.pdf
- NRDC-Greening Advisor: Onsite Renewable Energy Generation http://www.nrdc.org/enterprise/greeningadvisor/en-generation.asp
- NRDC-Greening Advisor: Purchasing Renewable Energy http://www.nrdc.org/enterprise/greeningadvisor/en-purchasing.asp

# Purchasing CO<sub>2</sub> Energy Offsets:

Offsetting carbon emissions helps to fund green technology and innovations by supporting environmental organizations focused on reversing the effects of your carbon footprint.

#### **Resources:**

- NRDC-Buying Carbon Offsets: What You Need to Know http://www.nrdc.org/globalwarming/offsets.asp
- EPA-Offsets and Green Power Purchases Guidance http://www.epa.gov/climateleaders/resources/optional-module.html)

### **Water Conserving Toilets & Faucet Aerators:**

Like an energy efficient appliance, low-flow toilets perform the same function but use less water in the process. Water efficient toilets are an easy way to lower water consumption without having to change employee habits. Likewise, faucet aerators lower the flow of water from sinks but still maintain water pressure and temperature. Aerators are a cheap addition to any faucet that can help substantially reduce water consumption.

- EPA: WaterSense® http://www.epa.gov/watersense
- DOE: Energy Cost Calculator for Faucets
  <a href="http://www1.eere.energy.gov/femp/technologies/eep">http://www1.eere.energy.gov/femp/technologies/eep</a> faucets showerheads calc.html
- DOE: Energy Cost Calculator for Toilets & Urinals
  <a href="http://www1.eere.energy.gov/femp/technologies/eep\_toilets\_urinals\_calc.html">http://www1.eere.energy.gov/femp/technologies/eep\_toilets\_urinals\_calc.html</a>
- NRDC: Greening Advisor: Low-Flow Fixtures and Water-Efficient Appliances http://www.nrdc.org/enterprise/greeningadvisor/wu-fixtures.asp

## **Irrigation & Low Impact Development:**

Storm water is a major contributor to the increased stress placed on our tributaries and rivers like the Cumberland. Instead of draining useful water away from your building, consider green irrigation techniques to keep your landscaping as green as your office practices.

### **Resources:**

- Metro Water Services-Low Impact Development (LID) Resources http://www.nashville.gov/stormwater/LIDResources.asp
- NRDC-Greening Advisor: Planting Native & Drought-Tolerant Species http://www.nrdc.org/enterprise/greeningadvisor/wq-runoff.asp
- **EPA:** Greenscapes http://www.epa.gov/epawaste/conserve/rrr/greenscapes/index.htm)
- NRDC Greening Advisor: Minimizing Urban Runoff <a href="http://www.nrdc.org/enterprise/greeningadvisor/wq-runoff.asp">http://www.nrdc.org/enterprise/greeningadvisor/wq-runoff.asp</a>

### **Conducting a Waste Stream Audit:**

Most office waste can be recycled. A waste stream audit will help your office to identify how efficiently you use the resources that you bring into the office as well as how much of your waste is or can be diverted to a recycling facility.

- **EPA-Waste Diversion**<a href="http://www.epa.gov/oaintrnt/waste/index.htm">http://www.epa.gov/oaintrnt/waste/index.htm</a>
- EPA-Waste Assessment Approaches http://www.epa.gov/waste/partnerships/wastewise/approach.htm
- The Solid Waste Policy Group-Waste Audits http://www.cook.rutgers.edu/~envpurchase/basics\_cycle\_audits.htm

## Writing an Environmentally Preferable Purchasing (EPP) Policy:

An effective environmentally preferable purchasing (EPP) policy will help your company to ensure that the products brought into the office are green and/or designed to be energy efficient including paper products, equipment, paint, and furniture. An EPP should also provide employees with preferred products and their providers so the search for green products is streamlined.

#### **Resources:**

- NRDC Greening Advisor: An Environmentally Preferable Purchasing Policy <a href="http://www.nrdc.org/enterprise/greeningadvisor/gpp-purch\_policy.asp">http://www.nrdc.org/enterprise/greeningadvisor/gpp-purch\_policy.asp</a>
- EPA: Database for Environmental Information for Products & Services http://www.yosemite1.epa.gov/oppt/eppstand2.nsf
- EPA: Environmentally Preferable Purchasing (EPP) Policy http://www.epa.gov/epp/index.htm
- **Green Seal**® http://www.greenseal.org
- ENERGY STAR® http://www.energystar.gov

### **Implementing Office Recycling:**

Making sure you have a recycling service and that you are using it properly can help divert most of your office waste from a landfill. Most waste produced at the employee waste station consists of paper and other recyclable products. By centralizing trash it prevents the need for two receptacles at each workstation and still provides convenient waste diversion for the most abundant forms of office waste.

- EPA-How to Start or Expand a Recycling Collection Program http://www.epa.gov/epawaste/partnerships/wastewise/pubs/howtopdf.pdf
- Metro Recycling Services http://www.nashville.gov/Recycle/
- Tennessee Recycling Directory http://www.cis.tennessee.edu/RMD
- Mid-America Regional Council-How to Set Up Recycling at Your Workplace <a href="http://www.recyclespot.org/business">http://www.recyclespot.org/business</a> tips.asp

### **Benchmarking and Reducing Paper Use:**

Current technology makes it increasingly simple to reduce paper use. Benchmarking how much paper is used in your office will help you more effectively find ways to reduce paper costs and consumption. Most documents (especially drafts) can be printed double sided. Double sided copying and printing is just one of many easy ways to decrease the amount of paper your office uses.

- NRDC Greening Advisor: How to Create a Smart Paper Plan for Your Business http://www.nrdc.org/cities/living/paper/toolkit.asp
- NRDC-Greening Advisor:Reducing Paper Use http://www.nrdc.org/enterprise/greeningadvisor/pa-reducing.asp
- Lawrence Berkeley National Laboratory-Cutting Paper <a href="http://eetd.lbl.gov/paper">http://eetd.lbl.gov/paper</a>
- Environmental Paper Network-Paper Calculator http://calculator.environmentalpaper.org

# **Recycling E-Waste:**

E-waste is rapidly becoming one of the U.S.'s largest problems. Rapidly evolving technology has left most offices with outdated and/or broken office equipment collecting dust in corners or supply closets. This equipment can be recycled and often contains hazardous materials that should only be disposed of by qualified electronic waste recyclers. By recycling that old copier it will not only be disposed of properly but it will also free up your office space.

### **Resources:**

- TDEC-Facing the Challenge of Electronic Scrap http://www.tn.gov/environment/swm/escrap
- NRDC-Greening Advisor: Proper Disposal of Electronics <a href="http://www.nrdc.org/enterprise/greeningadvisor/wm-disposal.asp">http://www.nrdc.org/enterprise/greeningadvisor/wm-disposal.asp</a>
- **E-Stewards**<a href="http://www.e-stewards.org">http://www.e-stewards.org</a>
- NRDC-E-waste: Saving Developing Communities from Our Electronic Junk <a href="http://www.simplesteps.org/home-garden/stuff/e-waste-saving-developing-communities-our-electronic-junk">http://www.simplesteps.org/home-garden/stuff/e-waste-saving-developing-communities-our-electronic-junk</a>

### **Eliminating Disposable Kitchenware and Bottled Water:**

Many offices expend large amounts of money each year to keep refrigerators stocked with bottled water and disposable cups and utensils available for food and coffee. Disposable kitchenware is easily replaced by encouraging employees to bring reusable items from home. Permanent water bottles or glasses and a water filter can quickly replace bottled water for minimal costs. Part of the money saved annually from purchasing these disposable items can help offset the one-time costs of their replacements.

- GreenYour: Choose Eco-Friendly Food Service Items <a href="http://www.greenyour.com/node/13205">http://www.greenyour.com/node/13205</a>
- Green Business Bureau: Five Reasons Not to Drink Bottled Water <a href="http://www.gbb.org/tag/bottled-water">http://www.gbb.org/tag/bottled-water</a>
- NRDC: The Burden of Buying Bottled http://www.simplesteps.org/food/shopping-wise/water-weight-burden-buying-bottled

## **Conducting a Commuter Survey & Reducing Single Vehicle Commuters:**

Conducting a commuter survey will help you to identify what incentives and programs will have an impact on your employees. Effective implementation of transportation programs will help to cut down the number of single vehicle commuters and reduce traffic around your worksite.

#### **Resources:**

- Music City Circuit
  http://www.nashvillemta.org/setpage.asp?page=musiccitycircuit.html
- NRDC-Change Your Commute, Change Your City http://www.simplesteps.org/community/businesses-markets/change-your-commute-change-your-city

### **Alternative Workweek & Virtual Meeting Programs:**

Alternatives to driving to and from work or meetings can save employees a lot of money on gas as well as reduce emissions. Alternative workweeks can also reduce expenses for building and company operations. Virtual meeting programs can also help save money on gas, airfare, car rental, hotels, and other travel expenses.

#### **Resources:**

• DC-Work From Home: Boost the Environment...And Your Wallet http://www.simplesteps.org/community/businesses-markets/work-home-boost-environmentand-your-wallet

# **Starting an Employee Carpool Program:**

Carpools can significantly lower the number of cars on the road and help alleviate some parking constraints. A carpool program or benefit is a good way to reduce traffic around your worksite, increase positive employee interaction, and to ease parking constraints.

- EPA-Carpool Incentive Programs
  <a href="http://www.bestworkplaces.org/empkit/files/section3/carpool incentives brief.pdf">http://www.bestworkplaces.org/empkit/files/section3/carpool incentives brief.pdf</a>
- NRDC Greening Advisor-Employee Carpools http://www.nrdc.org/enterprise/greeningadvisor/ta-carpools.asp
- Pace Rideshare-Driving Cost Calculator <u>https://www.pacerideshare.com/en-US/savings.aspx</u>

## **Implementing a No Idling Policy:**

Idling wastes fuel and money while polluting the air around your workplace. A no idling policy is a simple way to save money while preventing pollution.

#### **Resources:**

- NRDC-Greening Advisor: No Idling Policies http://www.nrdc.org/enterprise/greeningadvisor/ta-idling.asp
- EPA-SmartWay<sup>TM</sup> Idling Savings Calculator http://www.epa.gov/smartway/transport/calculators/index.htm
- Federal Highway Administration-Idle Reduction Techniques http://www.fhwa.dot.gov/environment/air\_quality/cmaq/reference/idle\_reduction

## Offsetting CO<sub>2</sub> Emissions from Employee Travel & Commuting:

Support carbon reduction programs by offsetting your employee travel and commuting carbon emissions. Carbon offset funding is used to directly counteract your transportation carbon footprint in ways like planting trees and implementing carbon reduction technologies in our community.

- NRDC-Offsetting Carbon Emissions from Travel http://www.nrdc.org/enterprise/greeningadvisor/ta-carbon\_offsets.asp
- EPA-Greenhouse Gas Equivalencies Calculator http://www.epa.gov/cleanenergy/energy-resources/calculator.html

# **Transit Benefit Programs-**

Providing resources to encourage employees to green their commuting choices will benefit not only your office but also the areas where your employees commute and their weekend travel. Nashville has many resources for alternate forms of transportation. Your commuter survey will help you to identify which ones are valuable to your employees.

### **Resources:**

• MTA's Easy Ride

http://www.nashvillemta.org/PDF/EasyRide\_InfoCard2010.PDF

• Music City Star

http://www.musiccitystar.org

• Vanderbilt University-SustainVU

http://www.vanderbilt.edu/sustainvu/what-we-do/transportation

• NRDC Greening Advisor: Public Transportation

http://www.nrdc.org/enterprise/greeningadvisor/ta-public\_transportation.asp

### **Calculating Your WalkScore® and Implementing Bike Amenities:**

Your WalkScore® measures your location based on the amenities surrounding it that are within walking distance. The WalkScore® helps to measure employee travel needs throughout the workday. Bike sharing gives employees an alternate option to get around during the day from meeting to meeting or to an appointment. If employees can leave the car at home and still have the freedom to get around the city they are more likely to use alternate transportation.

### **Resources:**

• WalkScore®

http://www.walkscore.com

MTA's Bike & Ride

http://www.nashvillemta.org/news/Pub120.pdf

• NRDC Greening Advisor: A Bicycle-Friendly Environment

http://www.nrdc.org/enterprise/greeningadvisor/ta-bicycles.asp

• NRDC: 12 Tips for Safe Bike Commuting

 $\underline{http://www.simplesteps.org/home-garden/getting-about/shifting-gears-12-tips-bike-commuting}$ 

• Federal Highway Administration-Bicycle & Pedestrian Program

http://www.fhwa.dot.gov/environment/bikeped